

# Contact + Source

- Blog: [www.raymondcamden.com](http://www.raymondcamden.com)
- Email: [raymondcamden@gmail.com](mailto:raymondcamden@gmail.com)
- Twitter: [raymondcamden](https://twitter.com/raymondcamden)
- Source (slides + code): <https://github.com/cfjedimaster/vue-pearson-workshop>

A large, light gray play button icon is positioned on the left side of the slide. It consists of a white right-pointing triangle centered within a series of concentric circles, all rendered in a light gray color.

# Up to Speed with Vue.js

## Section 1 – Beginning Vue.js

# Why?



# Simple

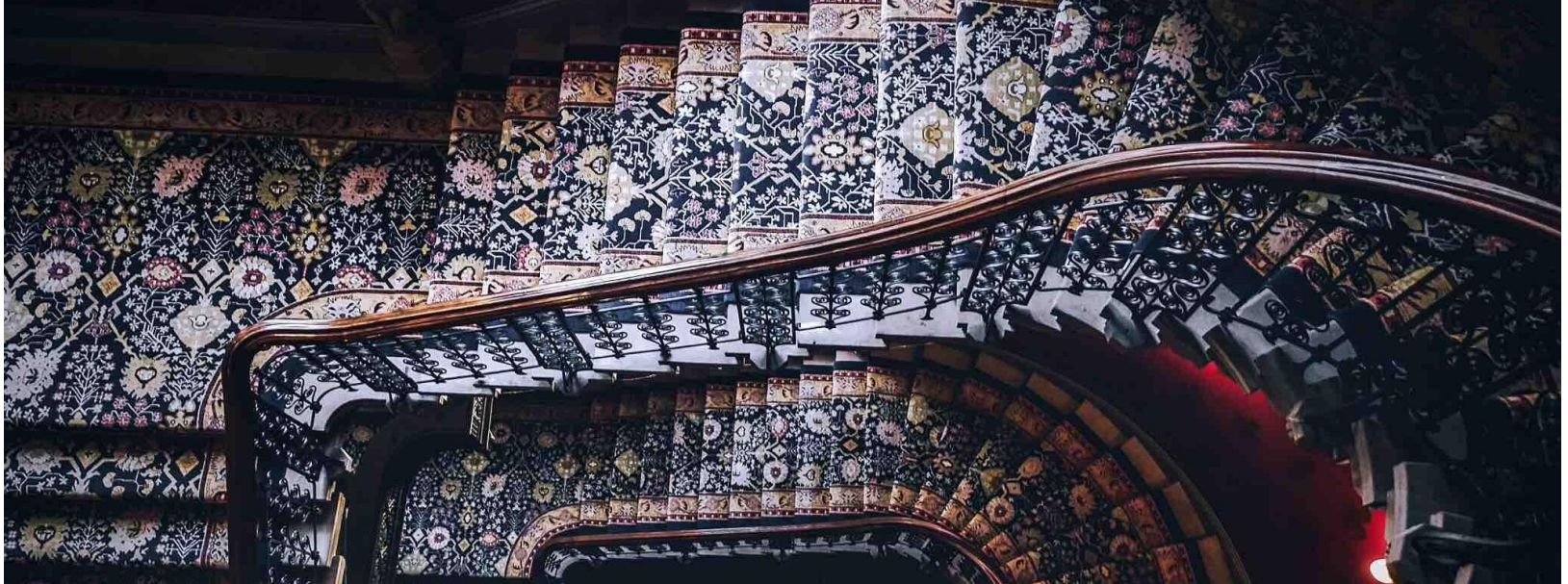


# No Build Process





# Scalable



# What?



# Quick Vue Facts

- Created by Evan You (@youyuxi)
- Released in February of 2014
- Currently is version 2.5.16
- Main site: vuejs.org
- GitHub: <https://github.com/vuejs>





# Even More Vue Facts!

- Docs: <https://vuejs.org/v2/guide/>
- Forum / Chat
- Tooling
- Newsletter, blog, twitter (@vuejs), jobs board
- T-Shirts!



# What again?

- Two-way binding between your DOM and JavaScript
- Template Language (aka Declarative Rendering)
- And I know I said this - but it does more. A lot more.

# How?



# Installation

- npm install
- cli install
- Download the bits from the site
- Copy and paste a script tag!



# <script> Style

Development Version

```
<script src="https://cdn.jsdelivr.net/npm/vue/dist/vue.js"></script>
```

Production Version

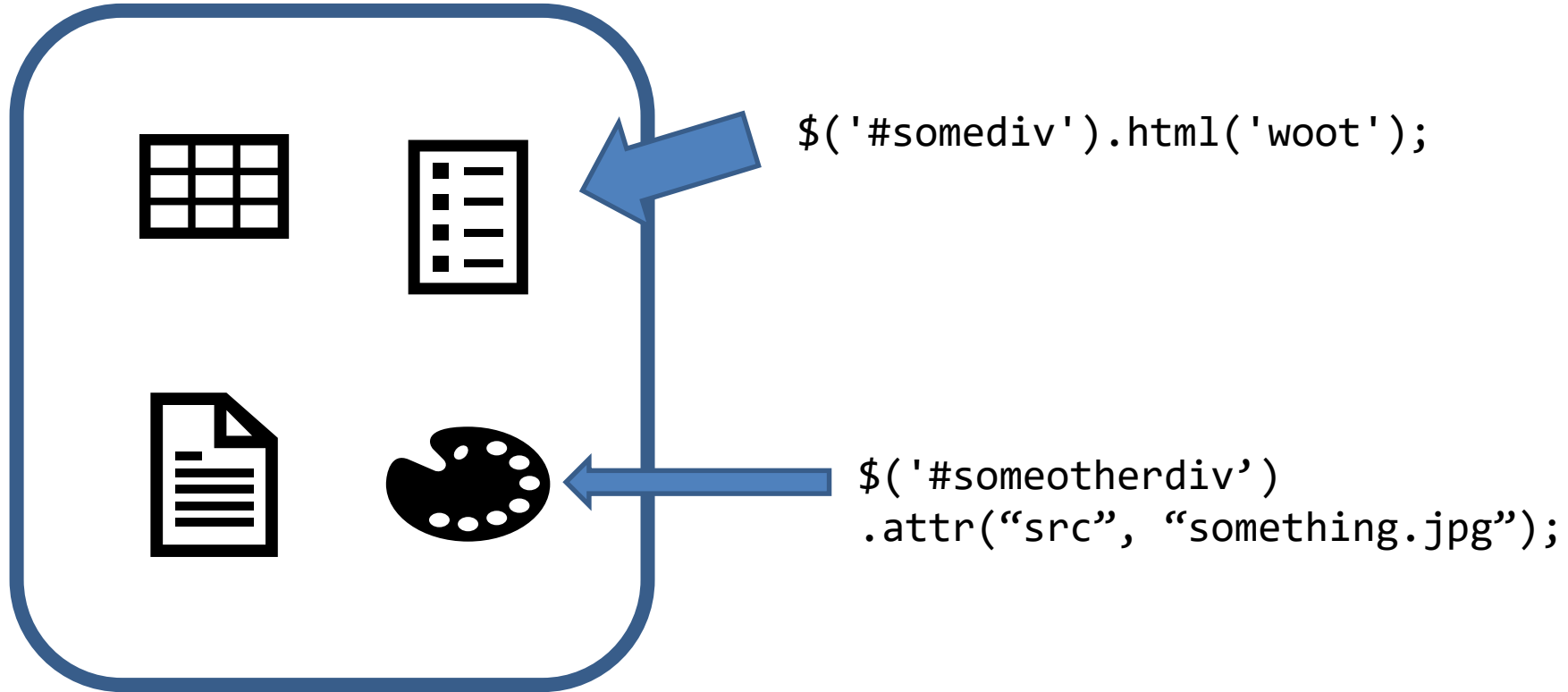
```
<script src="https://cdn.jsdelivr.net/npm/vue"></script>
```

# Write Some Code!

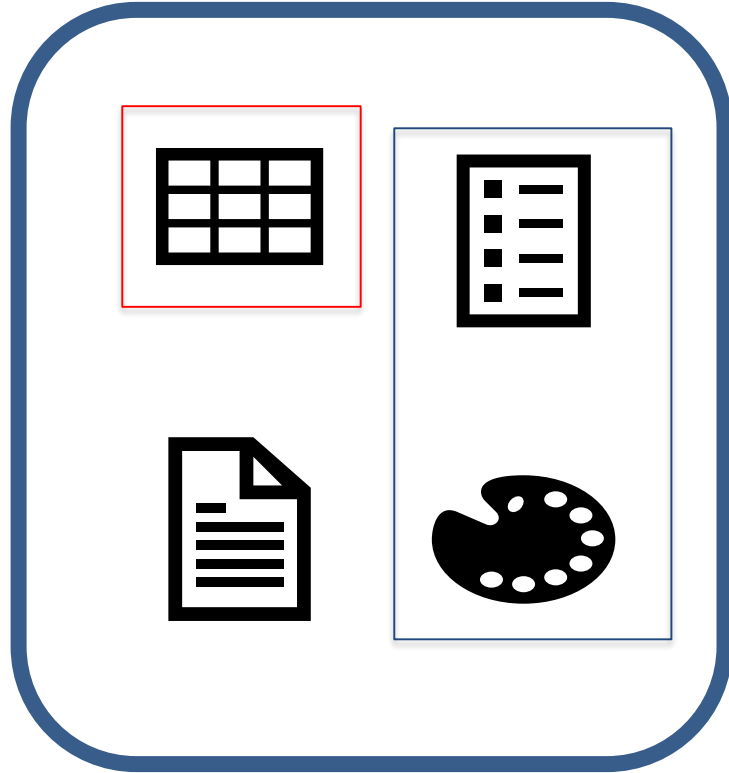
- Identify where you're going to render stuff
- Setup some data
- Render that data
- Add events (ie on this do that) and other fancy stuff



# Willy Nilly DOM Manipulation

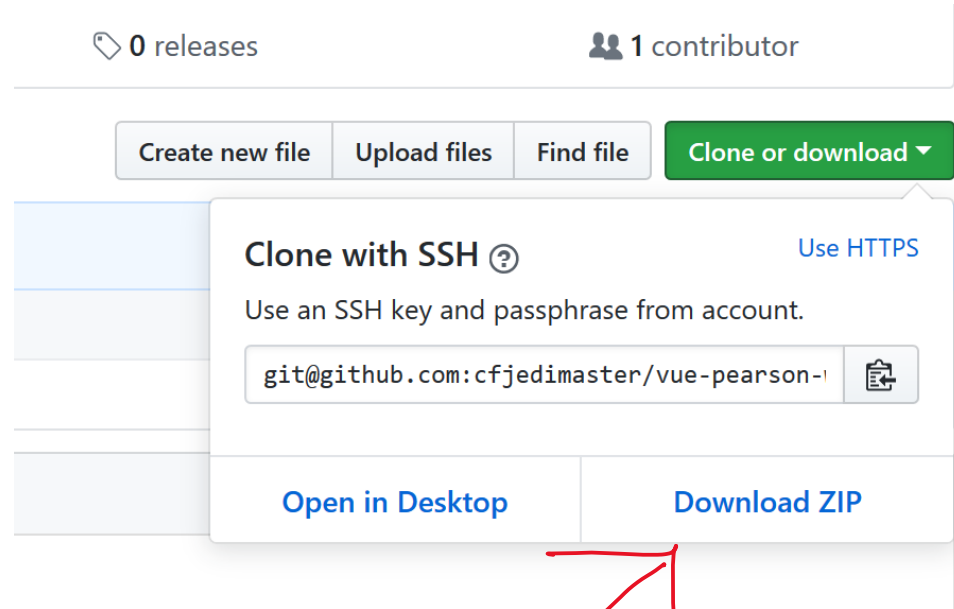


# Defining Vue's "Place"



# Vue Basics

- <https://github.com/cfjedimaster/vue-pearson-workshop>



# Examples – Let's start easy!

- Just one step above hello world...
- File: `code/1.0.html`, `code/1.1.html`

# Examples - Conditionals

```
<div id="app">  
  My name is {{name}}.  
  <span v-if="age > 40">  
    I remember floppies.  
  </span>  
</div>
```

```
<div id="app">  
  My name is {{name}}.  
  <span v-if="age > 40">  
    I remember floppies.  
  </span><span v-else>  
    What's a floppy?  
  </span>  
</div>
```

File: code/1.2.html, code/1.2a.html, code/1.3.html, code/1.4.html

# Examples - Loops

```
<div id="app">
  My name is {{name}}. Here
  are things I like:
  <ul>
    <li v-for="thing in things">
      {{thing}}
    </li>
  </ul>
</div>
```

```
var app = new Vue({
  el: '#app',
  data: {
    name: "Ray",
    things: [
      "cats",
      "star wars",
      "beer"
    ]
  }
});
```

File: code/1.5.html, code/1.5a.html, code/1.5b.html, code/1.5c.html



# Examples – Form Field Binding

- v-model connects a form field to data in Vue
- Works with all kinds of form fields

```
<div id="app">  
  <input type="text" id="name" v-model="name"><br/>  
  My name is {{name}}.  
</div>
```

File: code/1.6.html

# Examples - Events

- `v-on:EVENT="FUNCTION"`
- `v-on:click="something"`
- Defined in methods block of Vue instance
- Easy to do modifiers (`v-on:submit.prevent`)
- `@click="something"`

File: code/1.7.html

# Examples – Attribute Binding

- `v-bind:attribute="value"`
- `:attribute="value"`
- `v-bind:style="{bgcolor:curColor, font-style:textStyle}"`
- `v-bind:class="{highlighted:isActive, color:appStatus}"`

File: code/1.8.html

# Examples – Computed Properties

- Virtual properties
- Property X is based on real data A and B
- Defined in the computed part of the Vue instance

File: `code/1.9.html`, `code/1.9a` and `code/1.10.html`

# Examples – Vue's Lifecycle

- Events that occur while a Vue instance is doing stuff
- beforeCreate, created, beforeMount, mounted, beforeUpdate, updated, activated, deactivated, beforeDestroy, destroyed, errorCaptured
- <https://vuejs.org/v2/api/#Options-Lifecycle-Hooks>

File: code/1.11.html

# Quick Recap

- How to add Vue to a page and start an "app"
- How to use the template language
- How to listen for events and bind DOM attributes
- How to work with "virtual" data
- How to do stuff as Vue loads



# Exercise One - Palindrome

- A word (or phrase) that is the same forwards and backwards
- Let the user type something in...
- And report if it is a palindrome
- Code's in `/code/exercise1.1`

# Exercise Two – Ajax Search

- Take user input
- Search against iTunes
- Render results
- <https://itunes.apple.com/search?term=X&limit=10&media=music>
- Code's in code/exercise1.2

# Break



A large, light gray play button icon is positioned on the left side of the slide. It consists of a white right-pointing triangle centered within a series of concentric circles, all rendered in a light gray color.

# Up to Speed with Vue.js

## Section 2 – Building Components

# What are components?

- Re-usable objects of awesome-ness
- Template + Logic + Style(\*) = Component
- Accepts properties and can emit events
- Can be global or local to a Vue app

# Examples – A Component

- How to define a component
- How to use a component

File: code/2.1.html



# Properties

- One way communication
- Can just list – or define types, required, etc
- Types: String, Number, Boolean, Function, Object, Array, Symbol
- You don't have to define everything

File: [code/2.2.html](#), [code/2.3.html](#), [code/2.4.html](#)

# Events

- How components 'talk' to their parents
- Component: `$emit('someNameHere', data)`
- Parent: `v-on:someNameHere`

File: `code/2.5.html`

# Slots

- Allow you to compose values to be passed in

```
<p text="Hey buddy, thank you for doing that thing. I  
appreciate it. Here's a kitten."></p>
```

```
<p>  
Hey buddy, thank you for doing that thing. I appreciate it. <strong>Here's a kitten.</strong>  
</p>
```

# Slots

```
<mything thankyou="Hey buddy, thank you for doing that  
thing. I appreciate it. Here's a kitten."></mything>
```

```
<mything>
```

```
<div slot="thankyou">
```

```
Hey, I want to <i>really</i> thank you for taking  
the time to do whatever. We here at Mega Corp truly  
care that you took the time. Oh, and here, please  
take a kitten!
```

```
</div>
```

```
</mything>
```

# Examples - Slot

- Show how to define a slot
- How to render it

File: `code/2.6.html`, `code/2.6a.html`

# More Slots...

- Multiple named slots
- Slots can access component data

```
<quiz url="https://api.myjson.com/bins/ahn1p">

  <div slot="intro" slot-scope="props">
    This is my custom quiz header for {{props.title}}.
  </div>

  <div slot="results" slot-scope="props">
    <h1>WOWOWOW!</h1>
    You got {{props.correct}} right out of
    {{props.length}} questions.
    Your percentage is {{props.perc}}%.
  </div>

</quiz>
```

# Building a Quiz With Vue.js

## Building a Quiz with Vue.js

📅 2018-01-22 📁 JAVASCRIPT 💎 VUEJS

For today's "Can I build *that* with Vue.js?" blog post, I'm sharing a simple quiz system I've built with Vue.js. The idea was to see if I could write Vue code that would handle a dynamic set of questions, present them to the user one at a time, and then report a grade at the end. I had fun building this, and it went through a few iterations, so let's get started!

# Exercise One – Music Component

- Take exercise 1.2 and turn results into component
- Code's in code/exercise2.1



# A Bit More on Components

- There's a Crap Ton
- Google Static Maps: <https://www.npmjs.com/package/vue-static-map>
- Bootstrap: <https://bootstrap-vue.js.org/>
- Vuetify: <https://vuetifyjs.com/en/>

# Bootstrap-Vue Example

```
<b-tabs>
  <b-tab title="first" active>
    <br>I'm the first fading tab
  </b-tab>
  <b-tab title="second" >
    <br>I'm the second tab content
  </b-tab>
  <b-tab title="disabled" disabled>
    <br>Disabled tab!
  </b-tab>
</b-tabs>
```

# Break



A large, light gray play button icon is positioned on the left side of the slide. It consists of a white right-pointing triangle centered within a series of concentric circles, creating a subtle shadow effect.

# Up to Speed with Vue.js

## Section 3 – Working with Routing

# Routing

- Not a part of Vue
- Official library: vue-router (<https://router.vuejs.org>)
- “If I’m at location /foo, I want to do Foo”
- “If I’m at location /goo, I want to go Goo”
- We’re now in App Country

# Getting Started

- Define (and figure out) your routes
- Create a VueRouter object
- Pass it to Vue
- Define a place to render routes

File: code/3.1.html, code/3.2.html

# Even More Routing...

- Nested Routes
- Programmatic Navigation: `router.push(...)`
- Named Routes
- A heck of a lot more...

# Exercise One –Master/Detail

- App has a master view (list of films) and detail (specific film)
- Use the Star Wars API ([swapi.co](http://swapi.co))
- Code's in `code/exercise3.1`



# Break



A large, light gray play button icon is positioned on the left side of the slide. It consists of a white right-pointing triangle centered within a series of concentric circles, with the outermost circle being the lightest gray and the innermost being white.

# Up to Speed with Vue.js

## Section 4 – State Management with Vuex

# State Management?

- Solves a problem you may not have!
- One Vue app – one set of data = easy
- One Vue app, a few components = mostly easy
- Many many components, lots of data = um...

# Vuex

- Another library (deeply integrated)
  - <https://vuex.vuejs.org/>
- “Store”
- Components can read from the store
- Components can't write to the store - directly

# Vuex Basics

```
const store = new Vuex.Store({  
  state:{  
    cart:[],  
    salesTax:0,  
    total:0  
  }  
});
```

# Vuex Basics

```
let app = new Vue({  
  el: '#app',  
  store: store  
});
```

# Vuex – Getting Data

- Use `store.state.X`
- Use a getter (defined in the store)

File: `code/4.1.html`

# Vuex – Setting Data

- mutations
- actions



# Mutations

- Defined in the Vuex Store
- Each has a particular name
- State is passed automatically
- Additional optional payload

File: code/4.2.html

# Actions

- Similar to before – just async. ;)
- Actions will fire off commits to mutations...
- Or you modify state directly
- Passed context object and optional payload

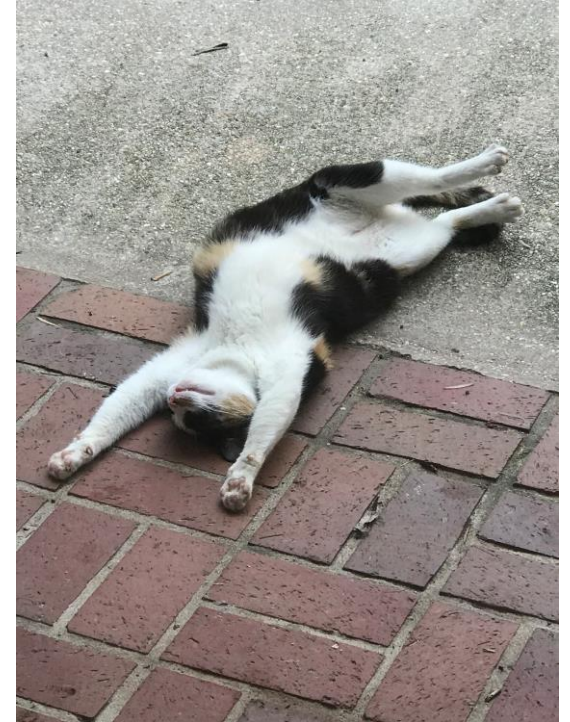
File: code/4.3.html

# More...

- Modules (think sub stores)
- Plugins
- Devtools Integration
- <https://vuex.vuejs.org>

# Exercise One – Cat Store

- CRUD for Cats
- UI to add, ~~edit, update,~~ and delete cats
- Code's in code/exercise4.1



# Break



A large, light gray play button icon is positioned on the left side of the slide. It consists of a white right-pointing triangle centered within a series of concentric circles, creating a subtle shadow effect.

# Up to Speed with Vue.js

## Section 5 – Using the CLI + Resources

# Yes, a CLI exists!

- <https://github.com/vuejs/vue-cli>
- Scaffolding
- Currently in betaRC! (3.x)



The CLI assumes prior knowledge of Node.js and the associated build tools. If you are new to Vue or front-end build tools, we strongly suggest going through [the guide](#) without any build tools before using the CLI.

# Install

- `npm install -g vue-cli (OLD!!!!)`
- `npm install -g @vue/cli (HIPSTER!!)`



# Quick Demo

- Show running the CLI (for general help)
- Show scaffolding an app
- Show starting the server

# Prototyping

- Plugin: `npm install -g @vue/cli-service-global`
- `vue serve Component.vue`

# Resources (Learning)

- <https://github.com/vuejs/vue-devtools> (Chrome, Firefox, and standalone via Electron)
- Sarah Drasner on CSS-Tricks: <https://css-tricks.com/intro-to-vue-1-rendering-directives-events/>
- Make note of her transition/animation posts
- My Stuff: <https://www.raymondcamden.com/tags/vuejs>
- Vuejs.org itself!

[Guide](#)

[API](#)

[Style Guide](#)

[Examples](#)

[Cookbook](#)

# Resources (Cool Stuff)

- VuePress - <https://vuepress.vuejs.org/>
- Nuxt.js - [nuxtjs.org](https://nuxtjs.org)
- Newsletters:
  - <https://www.getrevue.co/profile/vuejs-developers>
  - <https://news.vuejs.org>

